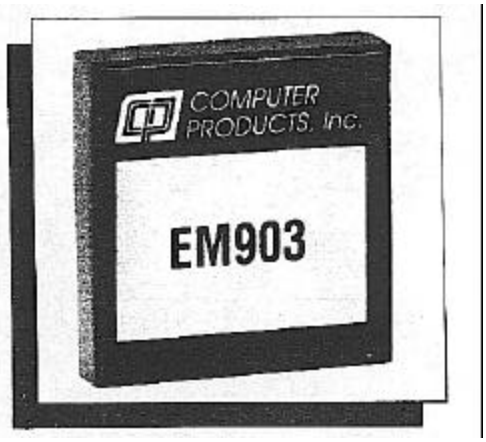
Jameco Part number 116986

EM900 SERIES
Single and Dual Output
5 to 9 Watt DC/DC Converters

- **Pi Input Filter**
- **500V Isolation**
- **Short Circuit Protected**
- **High Efficiency - 75%**
- **Non-conductive Plastic Enclosure**
- **For new designs, please see the NFC Series**



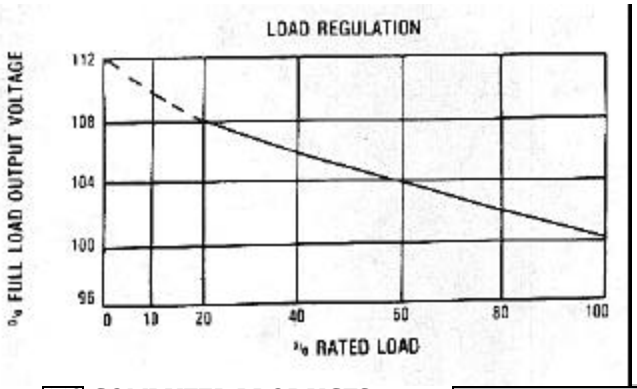
The EM900 series of low cost, general purpose DC/DC converters efficiently deliver 5 to 9 watts total power from a 2" X 2" X 0.4" package. Through careful attention to design, these economy modules achieve 75% typical efficiency. All models feature Pi input filters to minimize reflected input current plus continuous output short circuit protection. They require no output derating over their entire operating temperature range of -25°C to +71°C. These products are ideal for application where a local, low cost power source is needed to be derived from an existing 5V or 12V bus source.

SPECIFICATIONS

All specifications typical at nominal line, full load, and 25°C unless otherwise noted.

Output Specifications	
Voltage Accuracy	±3.0%, max.
Ripple and Noise, 20 MHz BW	100mV P-P, max.
Short Circuit Protection	Continuous
Input Specifications	
Input Voltage Range	
5 VDC Input Models	4.5 VDC-5.5 VDC
12 VDC Input Models	10.8 VDC-13.2 VDC
Reflected Ripple Current, 20 MHz BW	75 mA P-P
Input Filter	Pi Network

General Specifications	
Efficiency	75%
Isolation Voltage	500 VDC, min.
Isolation Capacitance	180 pF
Isolation Resistance	10%r8%r ohms
Switching Frequency	20 kHz, min.
Weight	2 oz. (57 grams)
Case Material	Non-Conductive Black Plastic
Mating Sockets, Case G	MS038-0
Environmental Specifications	
Operating Temperature Range	-25°C to +71°C
Derating	None
Storage Temperature Range	-40°C to 105°C
Humidity, Non-Condensing	20% to 95% RH
Cooling	Free Air Convection



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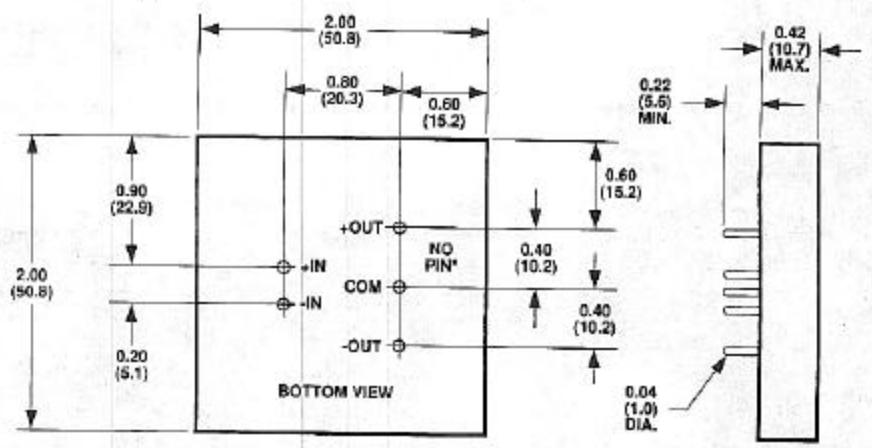
Input Voltage	Output Voltage	Output Current	Input Current		Reflected Ripple Current	Regulation[1]		Alt[2] Pin Out	Case	Model Number
			No Load	Full Load		Line	Load			
5 VDC	5 VDC	1000 mA	85 mA	1210 mA	75 mA P-P	1.2%	8%	S	G	EM901
5 VDC	12 VDC	600 mA	125 mA	1790 mA	75 mA P-P	1.2%	8%	S	G	EM903
5 VDC	15 VDC	500 mA	125 mA	1790 mA	75 mA P-P	1.2%	8%		G	EM904
5 VDC	±15 VDC	±300 mA	150 mA	2120 mA	75 mA P-P	1.2%	8%	S	G	EM952
12 VDC	±15 VDC	±300 mA	60 mA	875 mA	75 mA P-P	1.2%	8%	S	G	EM962

Notes:

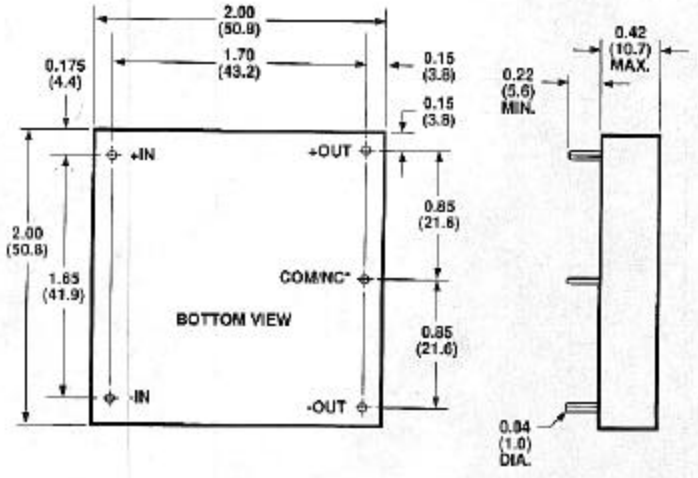
(1) Line regulation is per 1.0% change in input voltage. Load regulation is for load change from 100% to 20%.

(2) Alternate pin-out version, if available, is designated by suffix letter "S". For example, EM901S, etc. See case drawing.

CASE G
Standard Configuration
*No pin on single output models



CASE S
Alternate pin configuration
*No connection on single output models



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